

ABSTRACT

A storage switch in accordance with an embodiment of the invention is a highly scalable switch that allows the creation of a SAN that is easy to deploy and that can be centrally managed. Moreover, such a storage switch also allows the deployment of a global infrastructure, allowing the resources of the SAN, such as storage devices, to essentially be positioned anywhere on the globe. Further, such a storage switch allows a multi-protocol SAN, e.g., one that includes both iSCSI or Fibre Channel, and processes data packets at "wire speed." To further enable wire-speed processing, a switch in accordance with the invention has "intelligence" distributed to each of its linecards, through which it classifies packets into data and control packets, it performs virtualization functions, and it performs protocol translation functions. A switch in accordance with the invention further performs serverless storage services such as mirroring, snapshot, and replication.

15